

INTERNATIONAL SEARCH REPORT

PCT/US2004/036436

A. CLASSIFICATION OF SUBJECT MATTER				
IPC 7	F16L19/065	F16L23/06	F16L23/08	F16L23/032

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/063194 A (SWAGELOK COMPANY; WILLIAMS, PETER, C) 15 August 2002 (2002-08-15) abstract; figures -----	1
Y	FR 2 697 893 A (GOAVEC SA) 13 May 1994 (1994-05-13) abstract; figures -----	2-33
Y	CH 429 329 A (GUETTINGER & CO) 31 January 1967 (1967-01-31) figures 2,3 -----	2-6,8-33
A	DE 200 08 110 U1 (ARMATURENWERK HOETENSLEBEN GMBH) 18 January 2001 (2001-01-18) the whole document -----	1,7
A		7
A		1-6,8-33
A		1-33
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

22 February 2005

Date of mailing of the international search report

01/03/2005

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PCT/US2004/036436

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 302 714 A (KUELLER, GUENTER) 16 April 2003 (2003-04-16) abstract; figures -----	1-33

INTERNATIONAL SEARCH REPORT

PCT/US2004/036436

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 02063194	A	15-08-2002	CA	2437696 A1		15-08-2002
			CA	2437710 A1		15-08-2002
			EP	1358418 A2		05-11-2003
			EP	1358419 A2		05-11-2003
			EP	1471297 A2		27-10-2004
			JP	2004521285 T		15-07-2004
			JP	2004526911 T		02-09-2004
			MX	PA03007076 A		29-01-2004
			MX	PA03007077 A		29-01-2004
			NO	20033493 A		29-09-2003
			NO	20033494 A		29-09-2003
			TW	539824 B		01-07-2003
			TW	530142 B		01-05-2003
			WO	02063194 A2		15-08-2002
			WO	02063195 A2		15-08-2002
			US	2004212192 A1		28-10-2004
FR 2697893	A	13-05-1994	FR	2697893 A1		13-05-1994
CH 429329	A	31-01-1967	DE	1994888 U		17-10-1968
DE 20008110	U1	18-01-2001	NONE			
EP 1302714	A	16-04-2003	DE	20116872 U1		24-01-2002
			EP	1302714 A2		16-04-2003